

CLAIMS

I Claim:

- 1 1. A video graphics system comprising:
2 a transport stream port to receive a digital video transport stream, the digital video
3 transport stream including a data stream and control signals;
4 a transport stream interface control having an input coupled to the transport
5 stream port, and having a first output port to provide a set of control
6 signals, and a second output port to provide video graphics data; and
7 a data storage controller having a first port coupled to the first output port of the
8 transport stream interface control, an address port to provide an address
9 value, and a control port to provide control signals
- 1 2. The system of claim 1 further comprising:
2 a memory having a first port coupled to the second output port of the transport
3 stream interface, a second port coupled to the address port of the data
4 storage controller, and a third port coupled to the control port of the data
5 storage controller.
- 1 3. The system of claim 2, wherein the memory is a frame buffer memory.
- 1 4. The system of claim 2 further comprising:
2 a system bus/interface having a first port coupled to a fourth port of the memory,
3 a second port coupled to a fifth port of the memory.
- 1 5. The system of claim 4, wherein the fourth port of the memory is substantially the
2 same as the second port of the memory.
- 1 6. The system of claim 1, wherein the digital video transport stream is a digital video
2 broadcast transport stream.
- 1 7. The system of claim 6, wherein the control signals of the digital video transport stream
2 include a clock signal, a synchronization signal, and a data valid signal. It can also
3 contain an error signal, indicating there is an error in the transport stream.
- 1 8. The system of claim 7, wherein the set of control signals of the transport stream
2 interface control includes a start of field signal to indicate the start of a frame of
3 video.
- 1 9. The system of claim 8, wherein the set of control signals of the transport stream
2 interface control signal includes a valid data output to indicate when data on the
3 second output port of the transport stream interface control is active video data.

Sub 10. The system of claim 9, wherein the set of control signals of the transport stream interface control includes a valid vertical blanking interval signal to indicate when data on the second output port of the transport stream interface control is present during a vertical blanking interval.

1 11. The system of claim 6, further comprising:
2 a first video port to receive digital video of a first type, wherein the first type is
3 not digital video broadcast stream video;
4 a first video interface control having an input coupled to the first video port, and
5 having a first output port to provide the set of control signals, and a second
6 output port to provide video graphics data; and
7 a select node coupled to the transport stream interface control and to the first
8 video interface control.

1 12. The system of claim 11, wherein the first video port is a zoom video port.

1 13. The system of claim 11, wherein the first video port is a digital video stream port.

1 14. A method of receiving video graphics data, the method comprising the steps of:
2 receiving a transport stream associated with a digital video broadcast signal, the
3 transport stream having data signals and control signals;
4 generating a secondary set of controls signals from the transport stream's control
5 signals;
6 storing at least a portion of the transport stream data signals in a memory buffer
7 controlled by the secondary set of control signals; and
8 sending the contents of the memory buffer to a system bus.

Sub 15. The method of claim 14, further comprising:
2 wherein the steps of receiving, generating and storing occur when in a first mode
3 of operation;
4 during a second mode of operation, performing the steps of:
5 receiving a digital video signal having a data signals and a control signals,
6 wherein the digital video signal is of a different type than the
7 transport stream;
8 generating the secondary set of controls signals from the digital video
9 signal's control signals; and
10 storing at least a portion of the digital video signal in the memory buffer
11 based on the secondary set of control signals.

13 16. The method of claim 15, wherein the video signal is a Zoom Video signal.

1 17. The method of claim 14, wherein the memory buffer is a frame buffer.

1 18. A system for receiving a digital video broadcast signal, the system comprising:
2 a tuner to receive a digital video broadcast signal and to provide an analog output
3 signal;
4 a demodulator coupled to receive the analog output signal from the tuner, and to
5 provide a transport stream;
6 a video graphics adapter coupled to receive the transport stream and having a
7 system interface port, the video graphics adapter further includes a video
8 engine and a video output port.

1 19. The system of claim 18, wherein the video graphics adapter includes:
2 a memory to store at least a portion of the transport stream.

1 20. The system of claim 18, further comprising:
2 a central processor unit coupled to the system interface port of the video graphics
3 adapter; and
4 a transport demultiplexor coupled to demodulator.

1 21. A method of storing video data, the method comprising the steps of:
2 in a first mode of operation storing pixel information in a frame buffer of a video
3 adapter, wherein one line of frame buffer memory is representative of one
4 line of a video image to be displayed;
5 in a second mode of operation, storing compressed transport stream data in the
6 frame buffer, wherein one line of frame buffer memory is representative of
7 one transport stream packet.

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